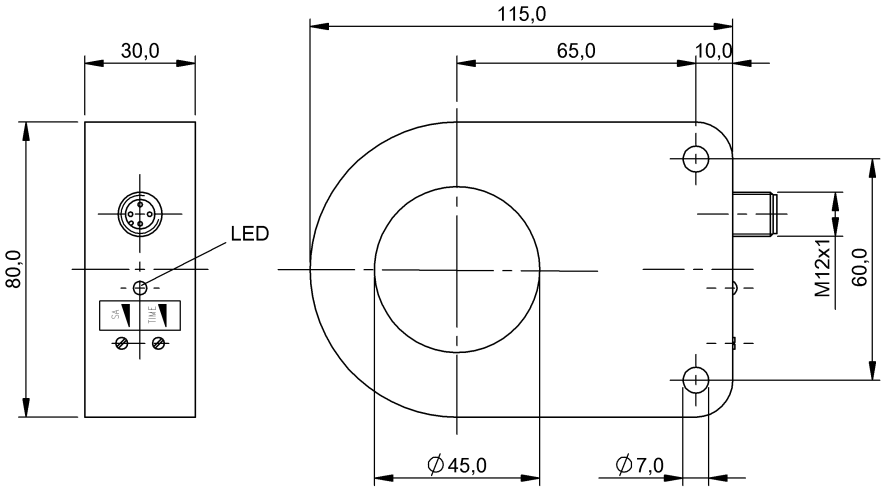
Inductive Sensors

BES IKV-045.23-G-Z-S4
Order Code: BES02TY



Basic features

Approval/Conformity	CE WEEE
Basic standard	IEC 60947-5-2
Target material	Steel

Display/Operation

Function indicator	yes
Power indicator	no

Electrical connection

Connection	M12x1-Male, 4-pin, A-coded
Polarity reversal protected	yes
Protection against device mix-ups	yes
Short-circuit protection	yes

Electrical data

Load capacitance max. at Ue	0.15 µF
Min. operating current Im	0 mA
No-load current Io max., damped	10 mA
No-load current Io max., undamped	10 mA
Operating voltage Ub	10...30 VDC
Output resistance Ra	Open collector
Pulse lengthening	2.5…250 ms
Rated insulation voltage Ui	75 V DC
Rated operating current Ie	200 mA
Rated operating voltage Ue DC	24 V
Rated short circuit current	100 A
Ripple max. (% of Ue)	15 %
Utilization category	DC -13
Voltage drop static max.	2 V

Environmental conditions

Ambient temperature	-25...70 °C
Contamination scale	3
EN 60068-2-27, Shock	Half-sinus, 30 g_n, 11 ms
EN 60068-2-6, Vibration	55 Hz, amplitude 1 mm, 3x30 min
IP rating	IP65

Functional safety

MTTF (40 °C)	1275 a

Interface

Switching output	PNP normally open (NO)

Material

Housing material	Plastic
Material sensing surface	Plastic

Mechanical data

Dimension	115 x 80 x 30 mm
Pass-through	45.0 mm
Target size min.	Ball D = 9 mm

Remarks

After eliminating the overload, the sensor is functional again after a load-dependent delay time of 5-30 s.
Pulse lengthening adjustable.
Static detection of metallic parts
Sensitivity adjustable
For more information about MTTF and B10d see MTTF / B10d Certificate

Indication of the MTTF- / B10d value does not represent a binding composition and/or life expectancy assurance; these are simply experiential values with no warranty implications. These declared values also do not extend the expiration period for defect claims or affect it in any way.

Connector Drawings

Wiring Diagrams